



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,744	08/04/2006	Jea-Sam Lee	2017-101	5706
53706 IPLA P.A. 3580 WILSHIRE BLVD. 17TH FLOOR LOS ANGELES, CA 90010	7590 12/29/2008		<div>EXAMINER</div> <div>KEMMERLE III, RUSSELL J</div>	
			<div>ART UNIT</div> <div>1791</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>12/29/2008</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/597,744

Applicant(s)

LEE, JEA-SAM

Examiner

RUSSELL J. KEMMERLE III

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 04 August 2006

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the overturned mold housing" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 5-7 are rejected based on their dependence from claim 4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackburn '109 (US Patent 2,584,109) in view of Blackburn '110 (US Patent 2,584,110), Faessle (US Patent 4,541,471) and Nemeskeri (US Patent 6,918,753).

The Blackburn references both disclose a method of press molding a clay object as well as a pressing machine and a method of making a mold for such an apparatus. The mold disclosed as preferably a gypsum mold in a housing with air tubes running through the mold to allow pressurized air to assist in removing the shaped clay from the mold. The housings contain an air supply hole connected to an air supply means to introduce the pressurized air in to the mold.

Faessle discloses a gypsum mold used for shaping materials that includes a wire net running through the gypsum mold across the entire depth of the mold (Col 4 lines 38-39, Fig).

Nemeskeri discloses a pressing machine that includes a frame having an upper mold housing which moves up and down and a lower mold housing that moves back and forth (horizontally) in order to allow for easier removal of the molded piece (see Figs. 8-15).

It would have been obvious to one of ordinary skill in the art, at the time of invention by applicant, to have used the gypsum molds of the Blackburn references in a machine as taught by Nemeskeri and having a wire net running through the mold as taught by Faessle. This would have been obvious because Nemeskeri discloses that

the horizontal movement allows for easier removal of the pressed product and the wire net of Faessle would strengthen the gypsum mold. It would be further obvious that some form of control means would be required to control the pressing time and pressure, as well as the air supply.

Referring to claim 2, while the prior art does not specifically disclose that the drive means are hydraulic, the use of hydraulics to control the movement of a press is extremely well known in the art and would have been obvious to one of ordinary skill at the time of invention by applicant.

Referring to claim 3, Blackburn '109 discloses that a hunk of clay is placed in the mold and pressed, this would require that the clay be cut to a suitable size prior to being placed in the mold in order to ensure that the proper amount of clay is used (Claim 1). One of ordinary skill in the art would understand that prior to molding the clay should be kneaded in order to remove air so that air bubbles are minimized in the final piece, and that after molding the piece would be dried and fired as is traditionally done with ceramic articles. Further, engraving and glazing of a ceramic article prior to firing is notoriously well known as methods of providing a decorative surface on ceramic articles, and would have been obvious to one of ordinary skill in the art as a means of providing a ceramic article with the desired final appearance.

Referring to claim 4, Faessle discloses a method of making a gypsum mold by providing a molding housing which has air supply lines running through it into which a prototype piece is placed, followed by filling the housing with gypsum which is allowed to dry around the prototype to form the mold surfaces. During the drying process

compressed gas is flowed through the gypsum to assist in water removal (Col 2 lines 3-24).

Referring to claim 5, since the Blackburn references are silent as to the temperature of the clay prior to the pressing it is assumed to be at room temperature. Further Blackburn '109 discloses that the clay to be pressed may be wet or damp, which one of ordinary skill in the art would understand would encompass a moisture content of 15-20 wt% (Col 5 lines 73-74).

Referring to claim 6, Blackburn '109 discloses that the air pressure is impressed against the pressed clay prior to the release of the molding pressure (Col 6 lines 5-9).

Referring to claim 7, while the cited references do not specifically disclose the amount of time the clay is pressed, one of ordinary skill in the art would understand that the pressing would only have to be done for a period of time sufficient to form the clay into the desired shape, and to optimize this time to 1-2 seconds.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUSSELL J. KEMMERLE III whose telephone number is (571)272-6509. The examiner can normally be reached on Monday through Thursday, 7:00-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/
Supervisory Patent Examiner, Art
Unit 1791

/R. J. K./
Examiner, Art Unit 1791